

I claim:

1. A system for capturing images and data related to a subject in a format that facilitates interpretation of the images and data by a human viewer or processing by a computer or other electronic processing device, wherein the subject emits or reflects a specific radiation pattern or signature within a predetermined range of frequencies, comprising:

at least one frequency discriminator including at least one beam splitter arranged to optically separate the received image of the emitted or reflected pattern or signature from a composite image of the subject.

2. A system as claimed in claim 1, further comprising at least one patternless illumination source, wherein said specific radiation pattern or signature results from reflection of radiation emitted by said illumination source at frequencies.

3. A system as claimed in claim 1, wherein said specific radiation pattern or signature is a radiation signature emitted by the subject, and wherein said system comprises at least two said discriminators.

4. A system for capturing images and data related to a subject in a format that facilitates interpretation of the images and data by a human viewer or processing by a computer or other electronic processing device, comprising:

a first illumination source arranged to project a light having a first range of frequencies onto said subject;

a receiver arranged to optically separate an image of said subject formed by reflected light of said first range of frequencies from a composite image of said subject.

5. A system as claimed in claim 4, wherein said light having a first range of frequencies is infrared light and said composite image includes reflections in said first range of frequencies and visible light reflections.

6. A system as claimed in claim 4, further comprising a second light source, said second light source being arranged to project light onto said subject from a different angle than said first light source.

7. A system as claimed in claim 6, wherein said second light source has a same frequency range as said first light source.

8. A system as claimed in claim 6, wherein said second light source has a different frequency range than said first light source.

9. A system as claimed in claim 4, wherein said receiver includes a pair of beam splitters.

10. A system as claimed in claim 9, wherein said receiver includes a third beam splitter for separating a full infrared image from a visible/slash composite image of the subject.

11. A system as claimed in claim 4, further comprising a range-finding device arranged to determine a distance from said receiver or light source to said subject.

12. A system as claimed in claim 4, wherein said subject and receiver are optically coupled by means of optical fibers.

13. A system as claimed in claim 12, wherein said illumination source and said subject are optically coupled by means of optical fibers.

14. A system as claimed in claim 4, wherein said illumination source and said subject are optically coupled by means of optical fibers.

15. A method for capturing images and data related to a subject in a format that facilitates interpretation of the images and data by a human viewer or processing by a computer or other electronic processing device, comprising:

projecting light from a first illumination source having a first range of frequencies onto said subject;

optically separating an image of said subject formed by reflected light of said first range of frequencies from a composite image of said subject.

16. A method as claimed in claim 15, further comprising the step of projecting light from a second image source onto said subject from an angle that is different than an angle at which said light from said first image source is projected.

17. A method as claimed in claim 15, wherein said light having a first range of frequencies is infrared light and said composite image includes reflections in said first range of frequencies and visible light reflections.

18. A method as claimed in claim 15, further comprising a light source, said second light source being arranged to project light onto said subject from a different angle than said first light source.

19. A method as claimed in claim 18, wherein said second light source has a same frequency range as said first light source.

20. A method as claimed in claim 6, wherein said second light source has a different frequency range than said first light source.